

In re Patent Application of:
TORRISI ET AL.
Serial No. 10/050,595
Filing Date: JANUARY 15, 2002

In the Specification:

Please replace the paragraph beginning at page 2, line 6, with the following rewritten paragraph:

The electronic switch 2 is also connected to an input terminal IN1 of the final stage 1. By providing a logic input signal Vin1 at a logic high to the input terminal IN1, the electronic switch 2 enables a charge current Iload1 to flow through so that energy is stored in the primary winding inductance L1. In a complementary way, when the logic input signal Vin goes low, the electronic switch 2 opens to generate an overvoltage value Vc1 to a terminal of the primary winding inductance L1.

Please replace the paragraph beginning at page 9, line 32, with the following rewritten paragraph:

The capacitance of the junction capacitor CG depends on the value of the voltage applied to the integrated circuit 15, which becomes negligible at voltages above a few tens of volts, as shown schematically in Figure 8. This ensures that the driver circuit 10, which comprises a sensing block provided by the integrated structure 13 of Figure 7 (i.e., a high voltage capacitor), will not, when the collector terminal C11 is applied ~~is~~ as a high voltage, interfere with the performance of the ignition system that contains it during the phase of triggering on an ignition spark at the load. Alternatively, the sensing block 13 may be provided in a power section of the integrated circuit by utilizing a parasitic capacitor, which would be connected

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structurally to a high-voltage terminal and be present in the power element employed (whether a power MOS transistor or an IGBT transistor).

Please replace the paragraph beginning at page 13, line 35, with the following rewritten paragraph:

Furthermore, the third and fourth transistors Q13 and Q14 have their control terminals connected together and to a node X10 provided intermediate between the second and fourth transistors Q12 and Q14 through a capacitor ~~C1~~ C10, and connected to a control terminal of a fifth or output transistor Q15. This transistor is connected to the supply voltage reference VDD and to an output terminal O29 of the internal generator 29 through a fifth resistor R15. The internal generator 29 shown in Figure 10 generates a stable signal on the node X10 for supplying to the fifth transistor Q15 and for providing the reference voltage Vref on the output terminal O29.

Please replace the paragraph beginning at page 15, line 31, with the following rewritten paragraph:

To summarize, the driver circuit 10 of this invention provides soft turn-on conditions for the power device connected to it, thus preventing any undesired overshooting. The ~~drive~~ driver provided is not bound to the variability of the power element characteristics. This driver circuit may also be used with a bipolar power transistor, which would be current driven rather than

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voltage driven as in this non-limitative example.